

# THE BEACON

JULY-AUGUST  
2006



Nebraska Emergency Management Agency



## *In This Issue:*

- Valentine Fire
- Dawes & Sioux County Fires
- GIS Mapping
- Hazard Mitigation



## FIRE THREATENS NEBRASKA COMMUNITIES DURING HOT, WINDY, DROUGHT-PLAGUED SUMMER OF 2006

Sirens sounded their eerie warnings in the Sandhills and Pine Ridge areas of northwest Nebraska during a fire-scorched summer season this year. Sunday, July 16 marked the beginning of an unprecedented period in which three Nebraska communities found themselves wondering if their very existence was in doubt.

At approximately 4:30 p.m. on July 16th the first call came in reporting smoke in a canyon about a half-mile north of Valentine. That call marked the start of a fast-moving fire that would ultimately consume more than 3,000 acres and claim all or part of 20 homes.



A badly burned tree trunk is all that stands between this tractor's shell and a 100+-foot drop to the canyon floor. The owner said he had parked it on the flat in his yard just above this location, but that somehow as the fire raced through it went over the edge.

Temperatures soared to 113 degrees during the firefighting, with humidity levels hovering in the area of 9

*(continued on page 3)*

### **On the cover...**

It was Friday night, July 28th, and nervous citizens watched the ominous cloud of black smoke approaching Chadron from the canyonlands. For those who had been in Valentine earlier in the month, it was a frightening case of déjà vu. Twice in the same month wildfires threatened Nebraska communities, and it was still very early in the season.



(continued from page 2)

percent. Those conditions, coupled with high winds, made the job of bringing the blaze under control particularly difficult.

When the smoke finally cleared, at least 59 fire departments had responded to help battle the blaze, officially known as the Big Rock Fire. Crews from Nebraska, Kansas



Harvey Whitney (red shirt and overalls) explains to Governor Dave Heineman how the fire came out of the canyon and raced through his house. A Nebraska National Blackhawk helicopter carries a 600-gallon bambi bucket in the background.

and South Dakota worked in shifts, joining numerous ranchers and other private rigs on the fire line.

Many residents of the threatened areas fled their homes as the fire roared up out of the canyons and into the north edge of Valentine. They reported fire fronts moving so quickly that they often had only a matter of minutes to flee the approaching flames.

As the fire raced over the ridges north of town, a 300-foot communication tower providing service to city and county agencies went down, cutting off some radio and internet connectivity. Fire personnel were able to communicate through a command truck radio system, and a portable communications tower was sent out from Lincoln to assist in re-establishing wide-area communications.

In addition to the mutual aid departments that responded to the call for aid, numerous state entities sped to the area. The Nebraska Emergency Management Agency dispatched mobile command and

communications vehicles and teams, and the Nebraska State Patrol had troopers in the area to assist with traffic control, along with their mobile command and communications vehicle.

The State Fire Marshal's Office dispatched its Wildland Incident Response and Assistance Team – a team that includes the Nebraska Forest Service.

In the early hours of the fire, Cherry County Emergency Manager Eilene Brannon called for air tanker support to provide aerial suppression, and the Nebraska National Guard sent two helicopters for fire-fighting support. These helicopters dumped water on the fire from 600- and 2,000-gallon buckets.

Although the fire did encroach upon the northeast end of Valentine, much of the loss of structures occurred in the canyons outside of town. In all, ten homes were completely destroyed and ten others suffered some degree of fire damage. Losses also included 21 outbuildings.

Approximately 200 Valentine residents were evacuated during the early stages of the fire.



The 300-foot communication tower serving city and county communications functions fell as the fire crested the hill above Valentine to the north.

The State Fire Marshal's Office investigated the blaze, and determined that the cause of the fire was sparks from power

(continued on page 4)

(continued from page 3)

lines in a canyon north of town. Wind blew branches against the lines, and when the bark had rubbed away, the moist layers beneath provided a path for an arc.

By Friday, July 21st, troops from the National Guard and firefighters from departments that had responded to assist were being sent home. A smaller contingent from Valentine and the Fort Niobrara Wildlife Refuge remained on the scene to monitor hot spots and put finishing touches on the fire's perimeter. The damage total came to an estimated \$1.3 million, which included destroyed and damaged homes and outbuildings, but not damage to city and county infrastructure.

Chadron, Nebraska Fire Chief Pat Gould was on duty in Valentine in his capacity as Deputy State Fire Marshal, and had a few days to recuperate after returning home to Chadron. However, late in the day on Thursday, July 27 fires ignited by a dry lightning storm that passed through on Wednesday were beginning to make his



The Spotted Tail fire begins to show above the ridge south of the Chadron State College Campus late on Friday, July 28.

life very interesting again. By Friday he was fighting on his home turf as a number of fires began in the Chadron area.

The situation soon resolved itself into two large fires and one smaller blaze to the south of the town of Chadron in Dawes County. South and west of town the Roberts Tract Fire burned west of Highway 385 and south of Highway 20. Just to the east the smaller Deadhorse Fire crawled

through forested canyonlands. East of Highway 385, directly south of Chadron and extending to the east, the Spotted Tail Fire burned toward town, posing a grave danger to Chadron.

Friday evening, the 28th, the flames raced through the treetops and the grasslands over the hill directly south of the Chadron State College campus. As the sirens sounded, day turned to night under the thick black smoke and Chadron was evacuated south of 6th Street. A valiant stand by firefighters across the south side



Moving at speeds of up to 40 feet per minute, the fire soon had moved down the hill toward campus. Here flames race through pine trees on "C Hill" behind the student union.

(continued on page 5)



(continued from page 4)

of Chadron stopped the flames yards from the edge of campus and kept the fire out of town.

At the same time, fires were burning to the west in Sioux County. Located on either side of Highway 20 east of the town of Harrison, the Thayer and Rudloff fires burned through canyon and grass lands and consumed tens of thousands of acres of Ponderosa Pine and native grasses. On Friday, July 28th a Type 2 Federal Fire Team had been brought into the Dawes County Complex firefight, and on the morning of Sunday, July 30th a Type 1 Federal Team arrived to coordinate the Sioux County Complex efforts.

This marked the first time that two Federal Fire Teams have worked simultaneously in Nebraska. The Type 2 Team in Dawes County, headed by Incident Commander Marc Mullenix remained in charge, even though the fire grew to a point where a Type 1 team could have been requested. The Type 1 team in Sioux County was headed by Incident Commander Dan Oltrogge.

Temperatures topped 100 degrees several days during fire-fighting operations, but a cold front moved through the area overnight on Monday, July 31, and temperatures on Tuesday were in the 80-degree range. Light rain accompanied the front in some areas, and the higher humidity and lower temperatures helped the firefighters.

Throughout the fire period, slurry bombers and helicopters with bambi buckets attacked from the air, while ground crews fought the fire in the grass and at



Smoke fills the air around Castle Rock in Sowbelly Canyon. This area was part of the Thayer Fire in the Sioux County Complex.

the edge of the canyons. As in the Valentine Big Rock fire, fire departments were not the only ones on duty. The Nebraska Emergency Management Agency sent teams and communications vehicles in the early hours of the fires, and other state agencies included the Department of Roads, the Nebraska State Patrol, State Fire Marshal's Office, Game and Parks, Department of Agriculture, the Nebraska Forest Service, and the Nebraska National Guard.

Also included in the efforts were large numbers of volunteers, the U.S. Forest Service, federal Fire Service pilots, and local law enforcement agencies.

On Wednesday, August 2, a third fire broke out in Sioux County, this one north and west of Harrison. This blaze, named the Oldaker Fire, quickly grew to approximately 1,000 acres, but Incident Commander Oltrogge immediately diverted resources from the other two fires to knock it down quickly and prevent it from racing across the Oglala National Grasslands and across the borders in to Wyoming and South Dakota. That fire was contained in

(continued on page 6)

(continued from page 5)

a matter of hours at about 2,400 acres.

The two federal fire teams were able to demobilize by the weekend of August 5-6, leaving local fire departments in charge of final mop-up operations.

In the final analysis, the two complexes combined for a total of approximately 76,500 acres burned. In the Dawes County Complex, the Spotted Tail Fire was listed at 17,935 acres, the Roberts Tract Fire at 9,934 acres, and the Deadhorse Fire at 85 acres. Total cost of fighting the Dawes

Complex fires as of August 4 was approximately \$3.2 million. In the Sioux County Complex, the Thayer Fire was listed at 37,900 acres, the Rudloff Fire at 8,379, and the Oldaker Fire at 2,336 acres, with a total cost of approximately \$850,000.

Dry conditions continue, and the fire danger remains high in much of Nebraska, but firefighters are cautiously enjoying some much-deserved rest.

## MEETING FIRST STEP TOWARD AN EMERGENCY CENTER

Reprinted by permission of Columbus Telegram

By JULIE BLUM/Telegram Staff Writer

COLUMBUS - The response from individuals who wanted to help after tornadoes struck Hallam was overwhelming.

Volunteers came from all around wanting to lend a hand after that 2004 disaster that devastated the small town in Lancaster County.

"There were so many people who wanted to show up and help," said Columbus and Platte County Emergency Management Director Tim Hofbauer.

The help was definitely needed, but with so many people, organization was the key.

In the town of Princeton, just a few miles away from Hallam, Hofbauer said a center was set up to determine who should assist and in what way.

Hofbauer hopes to set up a similar center in Platte County in case a disaster would ever strike here.

A group of about 40 volunteers met Thursday evening to review operations of an Emergency Volunteer Coordination Center. Many in attendance were expected to be from local and area emergency response agencies in the city and county

and members of the general public.

Hofbauer said the initial meeting was to make the public aware of the basic idea of a center.

"If we were to have a disaster affect Platte County and required a large number of people who wanted to come into town to help cleanup, we have to have a way to coordinate them to help," Hofbauer said.

Through a center, volunteers would register and then be assigned to an area where they would assist.

Volunteers would be needed for several different duties after a disaster, from cleaning up to taking inventory to assisting individuals directly affected by the incident, Hofbauer said.

Hofbauer said he hopes to find someone who would be willing to take charge of the center after it forms.

"What I'm hoping to do is if we have something of this magnitude, the responders and emergency workers will be really busy. But if we can get the volunteer center to operate on its own, then that takes some of the load off of the responders," Hofbauer said.

# BOSHART MAKES REAL-TIME MAPS FOR EMERGENCY MANAGERS DURING CRISES

## WORK OF CALMIT EMPLOYEE EXAMPLE OF AGGRESSIVE DEMAND FOR GIS SKILLS

Reprinted with permission from the Institute of Agriculture and Natural Resources.

*Editor's note: This is the second in a series of articles on employees of the School of Natural Resources' Center for Advanced Land Management Technologies (CALMIT) who work for other organizations. In it, we profile Chad Boshart, a geographic information systems (GIS) specialist who works closely with the Nebraska Emergency Management Agency.*

Chad Boshart explains his job this way: "I create maps, and most of them are as close to real time as possible."

But that's a tame description of the nature and importance of the job this School of Natural Resources (SNR) geographic information specialist does for the Nebraska Emergency Management Agency (NEMA). He goes on to say that in an emergency – a tornado, a flood, a disease outbreak, even a terrorist attack – representatives for Emergency Support Functions (ESF) from various state agencies will come to the State Emergency Operations Center (EOC) at the office of the director of NEMA, the state Adjutant General, to see the most current conditions. There they look at a wall of map information he has created to help them decide what to do next.

Staff members from the state Health and Human Services Systems, the Department of Environmental Quality, the State Patrol and the National Guard, among others, come to the EOC to find out the latest regarding a given emergency and plot strategy.

"The EOC is the basic communications center, where all the information comes in," he adds. "I'm running ArcGIS (a geographic information software) on a desktop computer. This plugs into their video wall – a combination of six, 52-inch monitors that show what I'm mapping, along with news and weather. Any ESF person can ask to see certain datasets, collected from the respective agency, on the display, including cities, roads, bridges, etc."

This service, provided by the SNR's Center for Advanced Land Manage-



ment Information Technologies (CALMIT) through a grant from the U.S. Department of Homeland Security, gives state officials the real-time spatial information they need to manage conditions and personnel in the field.

Agency representatives in the EOC are able to request specific maps, including the information they need to take back to their director or assistant director, says Boshart, of the University of Nebraska-Lincoln's SNR. "A lot of what I do is database management, mapping, and visual display."

These representatives have even included the governor, in the case of the tornado that devastated Hallam and other parts of southeastern Nebraska May 22, 2004.

Boshart arrived at the operations center the morning after a terrible tornado had torn apart Hallam and the farms and

*(continued on page 8)*



(continued from page 7)

towns nearby. He was also soon on the ground assisting NEMA in data collection and mapping of the area damaged by tornadoes. Other staff from CALMIT worked with NEMA to gather data from the air and on the ground.

Those efforts made such an impact on state officials that they received recognition, for this and other assistance, from then Gov. Mike Johanns, then Lt. Gov. Dave Heineman of the state Homeland Security Group and the Nebraska Military Department, for outstanding service as members of the Governor's Homeland Security Planning Team.

"I've conducted training for the 2005 floods in Hall and Adams counties. We trained health department personnel to do damage assessment for individual assistance," Boshart says. He and CALMIT's Jared Burkholder also assisted in NEMA's efforts related to the Dawes and Sioux county fires just recently.

Working with a digital tool created by a company founded by a former CALMIT staffer, Jeff Arnold, now president of Geo-Age of Jacksonville, Fla., Boshart taught people to use this personal digital assistant (PDA) to collect global positioning system (GPS) information and fill out an electronic form as they went house-to-house doing damage assessment, he notes.

"I would take the iPAQ's (the PDAs), download the data into my laptop, and once we had them all collected, we uploaded that information to a server, via the Internet," he adds. "I was in Grand Island, and as soon as we had that all uploaded, I called the EOC and said, 'The data has been uploaded, access the web page,' and they had the same information we had, just that quick."

Boshart has been doing this for about three years and is also an active participant in various emergency management

exercises, including terrorism drills. These included an all-agency exercise and two with HHS that focused on distributing medicine from a stockpile in the event of a disease pandemic. Another is slated for November.

He also works with state agencies to get timely data needed for proper emergency management, securing agreements for delivery of the most accurate, up-to-date information.

Boshart's work for NEMA began about three years ago when the agency came to CALMIT asking about a GIS for better emergency management.

With CALMIT associate director Jim Merchant and Arnold, then CALMIT operations manager, overseeing things, Boshart began building a sophisticated GIS for all manner of emergency management applications. NEMA was sold immediately.

"In the first demonstration we did for them – in Lincoln we drew a line and said, 'This is where a tornado went through' – we were able to bring up parcel (property) data and roads and everything and say, 'Okay, this road's going to be closed. These are the areas that were hit and completely destroyed.'"

From the parcel data, CALMIT staff then came up with an estimate of property damage, Boshart explains, and printed the map and other data out.

"And we were able to do it in about 15 minutes. NEMA said that it used to take them two days," he notes.

From that point on, NEMA was fully behind GIS, he says.

"The first time I was in the EOC, I was getting requests for maps left and right because they never had the capability before," he notes.

– by Charles A. Flowerday, editor, SNR



## HAZARD MITIGATION GRANT PROGRAM (HMGP) ADMINISTRATIVE PLAN IS AVAILABLE

The 2006 edition of the HMGP Administrative Plan is available for those interested in submitting applications for development of an all-hazards mitigation plan and for those that already have a FEMA approved mitigation plan to submit for brick and mortar projects.

The plan was revised due to the 2005 Thanksgiving weekend blizzard that resulted in a major disaster declared by President Bush. The declaration was approved January 26, 2006 for Public Assistance in 29 counties in Nebraska. The declaration number for the disaster is FEMA 1627-DR-NE and included the following counties: Antelope, Boone, Boyd, Custer, Dawson, Dundy, Frontier, Furnas, Garfield, Gosper, Greeley,

Hayes, Holt, Kearney, Knox, Lincoln, Logan, Loup, Madison, McPherson, Nance, Perkins, Phelps, Pierce, Red Willow, Rock, Valley, Wayne, and Wheeler. Applications are being solicited statewide; however those counties that were directly affected by the disaster will be given first priority for the project funds.

The plan describes the organization, management, policies, and procedures for the administration of the program. Please contact Lori Moore, State Hazard Mitigation Officer for further details and for your copy of the plan. Please contact her at (402) 471-7416 or by e-mailing her your request for a copy at [lori.moore@nema.ne.gov](mailto:lori.moore@nema.ne.gov).

## SETH HYBERGER NAMED PUBLIC ASSISTANCE OFFICER



Seth Hyberger, formerly Exercise Training Officer for the Nebraska Emergency Management Agency, has been named Public Assistance Officer for NEMA.

Hyberger replaces Georgia Welton, who has left the agency for other employment.

He will be responsible for all agency Public Assistance duties, including disaster incident assessment. He can be reached by phone at (402) 471-7236, or e-mailed at [seth.hyberger@nema.ne.gov](mailto:seth.hyberger@nema.ne.gov).

## PHOTOS FROM REGION 24 EXERCISE WITH NEBRASKA NATIONAL GUARD 72ND CIVIL SUPPORT TEAM





## BASIC ACADEMY PARTICIPANTS, AUGUST 2006



The August 2006 Basic Emergency Management Academy graduates included: (Front row, left to right) Kristin Herron, Patti Talamante, Charles L. Sherer, Carol Howard, Dawn Stimple, Melynda Osterman. (Back row, left to right) Alan Monte de Ramos, Mark Hogue, Richard Criss, Brad Kreifels, Daniel Jantzen, Eric Korus, David Landreth, Robert Cole, Rodney H. Hutt, Theodore U. Johnson. Not pictured is Randy Amundson.

## TRAINING OPPORTUNITIES

***For a list of training offered by agencies other than N.E.M.A., visit the N.E.M.A. website at <http://www.nebema.org> and click the link for “News and Events”***



***This is a listing of N.E.M.A.-sponsored training activities. To download a brochure or to register for a course, please visit the N.E.M.A. website at <http://www.nema.ne.gov> and click the button titled “Register for a Training Class”.***

### Training Calendar Year 2006 - 2007

COURSE & REGISTRATION	DATE	LOCATION	COURSE MANAGER
CBRNE/HAZMAT Technician Course *SERT & MOU Fire Dept. Members ONLY	October 10-13 and 16-20, 2006 (Two-week course.)	Nebraska Law Enforcement Training Center, Grand Island, NE	Tami Freeman <a href="mailto:tami.freeman@nema.ne.gov">tami.freeman@nema.ne.gov</a>
Exercise Planning	October 16-17, 2006 (Brochure Available)	Nebraska Western Community College Scottsbluff, NE	Mark Robertson <a href="mailto:mark.robertson@nema.ne.gov">mark.robertson@nema.ne.gov</a> Nikki Weber <a href="mailto:nikki.weber@nema.ne.gov">nikki.weber@nema.ne.gov</a>
HSEEP	October 18-20, 2006 (Brochure Available)	Nebraska Western Community College Scottsbluff, NE	Mark Robertson <a href="mailto:mark.robertson@nema.ne.gov">mark.robertson@nema.ne.gov</a> Nikki Weber <a href="mailto:nikki.weber@nema.ne.gov">nikki.weber@nema.ne.gov</a>
State Exercise Planning & Training Workshop	January 30-31 2007 (Brochure to come)	Holiday Inn Express North Platte, NE	Tami Freeman <a href="mailto:tami.freeman@nema.ne.gov">tami.freeman@nema.ne.gov</a>
Basic Academy 2007	March 18-23, 2007 (Brochure to come)	Holiday Inn Express North Platte, NE	Tami Freeman <a href="mailto:tami.freeman@nema.ne.gov">tami.freeman@nema.ne.gov</a>